

## PATENT ABSTRACTS OF JAPAN

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## (54) NON-VOLATILE SEMICONDUCTOR MEMORY

## (57)Abstract:

PURPOSE: To unnecessitate switching and applying plural kinds of power source voltage to a word line 5, and to have only to compare voltage of a bit line 3 with one kind of reference voltage Vref.

CONSTITUTION: An I-V characteristic is varied by varying threshold voltage Vth and the like of a cell transistor 2 to voltage of three kinds or more and multi-value data is stored, and a time is measured by a counter 10 until voltage of the bit line 3 becomes lower than the reference voltage Vref after this cell transistor is conducted. Thereby, a difference between these I-V characteristics is detected, and multi-value data is read out.

